United Nations A/71/190

General Assembly

Distr.: General
25 July 2016

Original: English

Seventy-first session
Item 19 of the provisional agenda*
Sustainable development

Cooperative measures to assess and increase awareness of environmental effects related to waste originating from chemical munitions dumped at sea

Report of the Secretary-General

Summary

Pursuant to General Assembly resolution 68/208, the present report conveys views of Member States and relevant regional and international organizations on cooperative measures to assess and increase awareness of the environmental effects related to waste originating from chemical munitions dumped at sea, with a view to exploring the possibility of establishing a database and options for the most appropriate institutional framework for such a database, as well as identifying the appropriate intergovernmental bodies within the United Nations system for further consideration and implementation, as appropriate, of the cooperative measures envisaged in the resolution. The information was drawn from responses of Member States and relevant regional and international organizations to the questionnaire circulated by the Secretariat on those topics as well as other available information.

* A/71/150.

16-12877 (E) 150816

Please recycle

I. Introduction

1. At its sixty-eighth session, the General Assembly adopted resolution 68/208, in which it invited the Secretary-General to continue to seek the views of Member States and relevant regional and international organizations on cooperative measures in order to assess and increase awareness of environmental effects related to waste originating from chemical munitions dumped at sea, with a view to exploring the possibility of establishing a database and options for the most appropriate institutional framework for such a database, as well as identifying the appropriate intergovernmental bodies within the United Nations system for further consideration and implementation, as appropriate, of the cooperative measures envisaged in the resolution, building on and without duplicating existing activities, and with a view to achieving efficiency and synergies, taking into account the mandates and capacities of relevant international and regional organizations.

2. The General Assembly also invited the Secretary-General to submit to the Assembly at its seventy-first session a report on the matters covered by the resolution, prepared using responses of Member States and relevant regional and international organizations, as well as other available information.

3. A questionnaire dated 4 May 2016 was circulated by the Secretariat in that regard to all Member States and relevant regional and international organizations, seeking their views on the topics mentioned above. Responses were then received from eight Member States, including Bosnia and Herzegovina, Croatia, Germany, Guatemala, Lithuania, Madagascar, Myanmar and the United States of America, as well as from the European Commission.

4. Responses were also received from the following United Nations system organizations and bodies, as well as other relevant regional and international organizations: the Joint Environment Unit of the United Nations Environment Programme (UNEP) and the Office for the Coordination of Humanitarian Affairs of the Secretariat, the UNEP Regional Seas Programme,[1] the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the Division for Ocean Affairs and the Law of the Sea of the Office of Legal Affairs, the Culture Sector of the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Intergovernmental Oceanographic Commission of UNESCO, the International Maritime Organization (IMO) and the Baltic Marine Environment Protection Commission (HELCOM).

[1] Currently 18 Regional Seas Conventions and Action Plans are involved in the UNEP Regional Seas Programme, of which 7 are administered by UNEP, including: the Convention for Cooperation in the Protection, Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central and Southern African Region (Abidjan Convention); the Action Plan for the Protection and Development of the Marine Environment and Coastal Areas of the East Asian Seas; the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention); the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention); the Amended Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean (Nairobi Convention); the Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region; and the Framework Convention for the Protection of the Marine Environment of the Caspian Sea (Tehran Convention).

5. In accordance with General Assembly resolution 68/208, the present report is prepared drawing on responses to the questionnaire as well as other available information.

II. Cooperative measures at the national, regional and global levels

A. Assessment and monitoring

6. Some recent activities to strengthen the assessment and monitoring of environmental effects related to waste originating from chemical munitions dumped at sea at the national, regional and global levels have been highlighted in the responses received. Those activities would contribute to the collective understanding of the issues related to waste originating from chemical munitions dumped at sea and to the cooperative measures envisaged in General Assembly resolution 68/208.

1. Activities undertaken by Member States

7. In its response, Lithuania stated that the key institution in Lithuania at the national level for the monitoring of waste originating from chemical munitions dumped at sea was the Environmental Protection Agency. The initial investigation of chemical munitions in bottom sediments in the Lithuanian exclusive economic zone was conducted in 2003. Since 2003, the Agency had taken part in several international projects related to waste originating from chemical munitions dumped at sea, including:

(a) Chemical Munitions, Search and Assessment (CHEMSEA). A flagship project of the European Union Strategy for the Baltic Sea Region, CHEMSEA is financed by the Baltic Sea Region Programme of the European Union. The assessment of the potential hazard of chemical munitions was made using data obtained from cruises at the dump site of the Lithuanian economic zone from 2012 to 2014. Arsenic concentrations, as an indicator of contamination by chemical warfare agents, were assessed in bottom sediments;

(b) Towards the Monitoring of Dumped Munitions Threat (MODUM). The project is funded by the North Atlantic Treaty Organization's Science for Peace and Security Programme. The aim of the project is to establish a monitoring network by observing chemical weapons dump sites using autonomous underwater vehicles and remotely operated underwater vehicles. Monitoring activities include habitat status evaluation, fish health studies and the modelling of possible threats to adjacent areas;

(c) Decision Aid for Marine Munitions (DAIMON). The project is financed by the Baltic Sea Region Programme of the European Union.

8. Germany, in its response, stated that the Government supported a systematic approach to munitions in marine waters and strove to develop reliable methods for monitoring and assessment of areas with munitions and regions where munitions were deliberately dumped during and after the First and Second World Wars. Germany had established an expert group on munitions in marine waters, chaired by the federal state of Schleswig-Holstein, which considered, for the German territorial

waters and the German part of the exclusive economic zone of the North Sea and the Baltic Sea, questions regarding all sorts of dumped munitions and materials for war. The group met regularly for information exchange. The main responsible authorities were, besides the five federal German coastal states (Hamburg, Bremen, Lower Saxony, Schleswig-Holstein and Mecklenburg-Vorpommern), the Government agencies for environment, transport and agriculture. The initial report of the expert group of more than 1,100 pages was published in 2011. Annual progress reports through 2015 were also available.

9. In view of the many singular aspects involved in munitions questions, in 2009 the German Government had established an informal federal network on munitions in marine waters, co-led by the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety and the Federal Ministry of Transport and Digital Infrastructure, for enhanced political information exchange and, where needed, timely reactions by the Government regarding the burden of inherited munitions.

10. In 2009, Guatemala established a commission on oil spill contingencies, their derivatives and potentially harmful substances at sea as well as in regional marine coastal areas. The commission constituted an advisory body that would respond to the national response plan which would be responsible for managing national efforts; developing, updating and implementing national contingency plans in the field of oil spills, derivatives and hazardous and noxious substances at sea; coordinating with national and international institutions; and reviewing and auditing national and local contingency plans so that Guatemala would have the capacity to prevent and respond in an adequate way to spills of the substances mentioned. In 2015, Guatemala established the National Commission on Maritime Administration with the aim of inter-institutional coordination of the Government's activities on maritime issues, including recommendations on national maritime policies. The Commission was preparing the National Maritime Plan, which would include actions regarding the maritime environment and the rational and sustainable use of maritime resources.

11. At the regional level, within HELCOM, Germany served as Co-Chair of the Expert Group on Environmental Risks of Hazardous Submerged Objects (HELCOM SUBMERGED), which compiled and assessed information about all kinds of hazardous objects and assessed the associated risks. Since 2004, the German delegation had also regularly and systematically reported discoveries of munitions to the secretariat of the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention).

2. The European Commission

12. According to the response from the European Commission, the European Union adopted the Marine Strategy Framework Directive in 2008, which provided for the achievement of good environmental status[2] of European Union marine waters by 2020. In relation to the environmental effects related to waste originating from chemical munitions dumped at sea, it was for European Union member States

[2] In article three, the Directive defines good environmental status as, in part: "The environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive." Available from http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008L0056.

to ensure that they complied with relevant international instruments dealing with the disposal of chemical weapons dumped at sea. The monitoring, preservation and, where necessary, remediation of ecosystems affected by substances was regulated by the applicable European Union and national health and environmental laws.

3. United Nations Convention on the Law of the Sea

13. The Division for Ocean Affairs and the Law of the Sea highlighted in its response that the United Nations Convention on the Law of the Sea provided the framework within which all activities in the oceans and seas must be carried out. The Convention, in part XII on the protection and preservation of the marine environment, stated the general obligation for States to protect and preserve the marine environment. It required States to take, individually or jointly as appropriate, all measures consistent with the Convention that were necessary to prevent, reduce and control pollution of the marine environment from any source. These measures included, inter alia, those designed to minimize to the fullest possible extent the release of toxic, harmful or noxious substances, especially those which were persistent, from land-based sources, from or through the atmosphere or by dumping.

14. The Convention also included provisions on monitoring and environmental assessments requiring States, consistent with the rights of other States, to endeavour, as far as practicable, directly or through the competent international organizations, to observe, measure, evaluate and analyse, by recognized scientific methods, the risks or effects of pollution of the marine environment. States had the obligation to publish reports of the results obtained or provide such reports at appropriate intervals to the competent international organizations, which should make them available to all States.

15. In the context of the preparation of the annual report of the Secretary-General on oceans and the law of the sea, the Division for Ocean Affairs and the Law of the Sea monitored and reported on developments relating to the protection and preservation of the marine environment, including various sources of pollution of the marine environment, such as dumping, and measures taken at the regional and global levels to prevent, reduce, and control pollutions of the marine environment, including chemical pollution.

16. In addition, in the context of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects, established by the General Assembly to provide an overview of the state of the marine environment, including socioeconomic aspects, the first global integrated marine assessment, also known as the first World Ocean Assessment, was launched in 2015 and welcomed with appreciation by the General Assembly in its resolution 70/235. The World Ocean Assessment included a specific chapter on waste.[3]

4. Regional Seas Programme of the United Nations Environment Programme

17. According to the UNEP Regional Seas Programme, the Regional Seas Conventions and Action Plans regularly produced assessment reports on the state of the marine environment in the respective regions that identified regional priorities and emerging issues. The marine environment assessments reviewed different pollutions, including land-based and ship-based pollutions. Chemical munitions

[3] See chapter 24, available from http://www.un.org/depts/los/global_reporting/WOA_RegProcess.htm.

functioned as a source of pollution to the marine environment and might have negative effects on humans and other life forms, including marine mammals and fish species. However, the environmental impacts of the dumping of chemical munitions were not well understood, especially with regard to long-term effects.

18. Among all seven UNEP-administered Regional Seas Conventions and Action Plans, only the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) had previously worked on issues related to the dumping of chemical munitions. The Barcelona Convention was adopted in 1976 and entered into force in 1978. It was an integral part of the Mediterranean Action Plan (1975). Participating countries included Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, the Syrian Arab Republic, Tunisia and Turkey. The European Union was also a participant.

19. Under the Mediterranean Action Plan, a report entitled "Ammunitions dumping sites in the Mediterranean Sea"[4] was produced in 2007, which listed the main dumping sites of the Mediterranean Sea along with a map based on the information collected from questionnaires to contracting parties, literature reviews nautical charts and sailor notices. The report also indicated that interviews with fishermen could be an important source of information to identify the location of the dumping sites.

5. Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter and its Protocol (London Convention and London Protocol)[5]

20. According to the response of IMO, the London Convention and London Protocol did not cover materials dumped before the entry into force of the Convention, but the issue of the dumping of obsolete ammunition had been on the agenda for more than two decades. Parties to the Convention (and subsequently the parties to the Protocol) were aware that, in the 1980s and 1990s, parties to the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention) had considered the issue of chemical warfare munitions that were dumped in the Baltic Sea in the wake of the First and Second World Wars in some detail and had agreed to leave the munitions where they were dumped. The parties to the London Convention and London Protocol subsequently endorsed that policy and in the past had discussed the location of historical sites of obsolete munitions.

21. In 2014, the governing bodies of the London Convention and London Protocol endorsed the inclusion of the issue of cooperative measures to assess and increase awareness of environmental effects related to waste originating from chemical munitions dumped at sea under the Joint Work Programme of the Scientific Groups, which meet annually, approximately six months before the meeting of the governing

[4] Available from http://195.97.36.231/dbases/MEETING_DOCUMENTS/09WG337_Inf18_eng.pdf

[5] The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention) was agreed in 1972 and entered into force in 1975. The Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Protocol) was agreed in 1996, entered into force in 2006, and will eventually replace the London Convention.

bodies, to advise the governing bodies on the scientific and technical aspects of any issue related to the Convention and Protocol.

22. The governing bodies of the London Convention and London Protocol endorsed the statement by the Scientific Groups that the Convention and Protocol had an important role to play in relation to chemical munitions dumped at sea and that the contracting parties as well as the secretariat should stay abreast of further developments. The governing bodies had instructed the secretariat to continue its outreach and dialogue with the regional bodies, the Organization for the Prohibition of Chemical Weapons (OPCW) and other stakeholders, as well as with the General Assembly, on the matter.

6. Baltic Marine Environment Protection Commission (HELCOM)[6]

23. HELCOM indicated in its response that the first targeted HELCOM activities on chemical munitions dumped at sea took place through the ad hoc Working Group on Dumped Chemical Munitions in the Baltic Sea (HELCOM CHEMU). The outcome was reported to HELCOM in 1995.[7]

24. The second round of action was through the ad hoc Expert Group to Update and Review the Existing Information on Dumped Chemical Munitions in the Baltic Sea (HELCOM MUNI). The outcome was published in 2013.[8]

25. The third round of action was the ongoing time-limited work of HELCOM SUBMERGED to complement earlier work on dumped chemical weapons, in accordance with its mandate for 2014-2016. The remit included the mapping and assessment of historic and current activities regarding dumped munitions and waste, wrecks and lost cargo in the Baltic Sea area. The current aim was to draft a report on those issues by the end of 2018.

7. Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention)

26. The European Commission highlighted the work of the OSPAR Commission, which was based on the legally binding OSPAR Convention. The OSPAR Commission had been studying the issue of dumped chemical and conventional munitions since 2000. It published a report entitled "Overview of past dumping at sea of chemical weapons and munitions in the OSPAR Maritime Area" in 2002 that

[6] The Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention) of 1992 aims to prevent pollution from ships (including dumping), pollution from land-based sources and pollution resulting from the exploration and exploitation of the seabed and its subsoil. The Convention also regulates the cooperation to respond to marine pollution by oil and other harmful substances. Current signatories are Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, the Russian Federation, Sweden and the European Union.

[7] HELCOM, "Final report of the ad hoc Working Group on Dumped Chemical Munitions (HELCOM CHEMU) to the 16th meeting of the Helsinki Commission (March 1995)". Available from http://helcom.fi/Lists/Publications/Forms/AllItems.aspx.

[8] HELCOM, "Chemical munitions dumped in the Baltic Sea: report of the ad hoc Expert Group to Update and Review the Existing Information on Dumped Chemical Munitions in the Baltic Sea (HELCOM MUNI)". Available from http://helcom.fi/Lists/Publications/BSEP142.pdf. See pages 89-91 for recommendations.

was subsequently updated in 2005 and again in 2010.[9] Details of the locations, types and quantities of materials dumped were recorded in a database.

27. In 2003, the OSPAR Commission agreed on recommendation 2003/2 on a framework for reporting encounters with marine-dumped conventional and chemical munitions in the Convention area that was subsequently replaced by an updated recommendation 2010/20. The recommendation requested the reporting of encounters with chemical weapons and munitions dumped at sea so that they could be recorded in the database.

28. In 2004, the OSPAR Commission published an updated review of Convention-wide practices and procedures in relation to marine-dumped chemical weapons and munitions that included guidelines for fishermen and other users of the sea and its coastline. In 2007, the Commission published a report entitled "Implementation of OSPAR recommendation 2003/2 database on encounters with dumped conventional and chemical munitions". In 2008, the Commission published a report entitled "Assessment of the impact of dumped conventional and chemical munitions".

29. Despite a recent development on strengthening cooperative measures to assess and monitor the environmental effects related to waste originating from chemical munitions dumped at sea, many in their responses mentioned that the full extent of the dumping of chemical munitions in the wake of the world wars would probably never be known, mainly owing to inadequate documentation of operations at the time of dumping and the subsequent loss of any records that might have been kept. Assessment of the environmental impacts of waste originating from chemical munitions dumped at sea was therefore challenging, owing to the uncertainty surrounding the quantities, type, locations and present condition or stability of the materials.

B. Awareness-raising, information-sharing and capacity-building

30. Lithuania organized several international events on the issue of waste originating from chemical munitions dumped at sea to raise awareness and share information, including: (a) a side event on chemical weapons dumped at sea, organized by the Polish and Lithuanian Permanent Representatives to OPCW, at the eighteenth Conference of the States Parties to the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (Chemical Weapons Convention), at The Hague in 2013; (b) side events on chemical munitions dumped at sea, with Poland and the International Dialogue on Underwater Munitions, at the nineteenth Conference of the States Parties to the Chemical Weapons Convention, at The Hague in 2014; (c) multilateral consultations on the future of OPCW at The Hague in 2015; (d) a side event entitled "The re-emergence of chemical weapons: sea-dumped chemical weapons" at the twentieth Conference of the States Parties to the Chemical Weapons Convention, organized in cooperation with the International Dialogue on Underwater Munitions, at The Hague in 2015; and (e) a regional meeting on education and outreach in Eastern Europe in Vilnius in 2016.

31. Germany stated that it had established, in 2013, a centralized national registration office for dumped munitions and other discovered items at the Maritime

[9] See the 2010 version, available from http://www.ospar.org/documents?v=7258.

Safety and Security Centre in Cuxhaven. The Centre helped to ensure regular and uniformed documentation and simplified data exchange with the other services, including the underwater data centre of the German military services and the data centres of the Federal Maritime and Hydrographic Agency. Discoveries of munitions were published each year in progress reports. Germany was also represented in international research and development, including the JPI Oceans programme, as part of a synergistic approach to the needs of the European Union.

32. Madagascar highlighted the ocean-based nature of its main economy and the importance of the safety of its marine environment, and expressed the need for capacity-building, including technical capacity for the assessment and monitoring of waste originating from chemical munitions dumped at sea, as well as relevant policy formulation and coordination.

33. The Division for Ocean Affairs and the Law of the Sea had recently developed a comprehensive training course on the law of the sea, with a focus on the United Nations Convention on the Law of Sea, including the rights and obligations of States with regard to the protection and preservation of the marine environment. Delivered at the national level, upon request, the course had so far benefited approximately 50 government representatives in the Islamic Republic of Iran and Somalia. In addition, in the context of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects, established by the General Assembly, which aimed to provide an overview of the state of the marine environment, including socioeconomic aspects, regional workshops had been held in support of the Regular Process as a key mechanism for the development of the first global integrated marine assessment and to help States enhance their assessment capacities. A preliminary inventory of existing opportunities and arrangements for capacity-building for assessments had also been developed in that context. The first global integrated marine assessment, also known as the first World Ocean Assessment, included chapters on capacity-building needs.

34. According to IMO, the governing bodies of the London Convention and London Protocol had attempted to bring relevant information on waste originating from chemical munitions dumped at sea to the attention of fishermen and mariners in all States parties to the Convention and Protocol through the publishing of locational information and the provision of advice regarding the handling of such munitions if found in nets. Some maps identifying known dump sites in the Mediterranean Sea, Australia, New Zealand, the United Kingdom of Great Britain and Northern Ireland, the United States and others had been made available. The International Hydrographic Organization included them in its charts.

35. HELCOM, through its HELCOM CHEMU, HELCOM MUNI and HELCOM SUBMERGED groups, had also conducted many awareness-raising, information-sharing and capacity-building activities. In the 2013 report of HELCOM MUNI, a number of relevant recommendations were made under the framework entitled "Investigate, manage and inform". HELCOM SUBMERGED had a response working group (HELCOM RESPONSE) dedicated to spill-response issues. The work of HELCOM RESPONSE included preparedness and response to incidents of hazardous substance spills, including those involving materials intended for chemical warfare. It was mentioned that regular data collection on hazardous underwater objects (munitions, wrecks and other dumped objects) had been raised within HELCOM SUBMERGED as a possible new area for further development.

C. Partnerships and cooperation

36. The Division for Ocean Affairs and the Law of the Sea emphasized that the provisions of the United Nations Convention on the Law of the Sea on global and regional cooperation required States to cooperate, directly or through competent international organizations, for the purpose of promoting studies, undertaking programmes of scientific research and encouraging the exchange of information and data acquired about pollution of the marine environment. States must endeavour to participate actively in regional and global programmes to acquire knowledge for the assessment of the nature and extent of pollution, exposure to it, and its pathways, risks and remedies.

37. In addition, States were required, when they became aware of cases in which the marine environment was in imminent danger of being damaged or had been damaged by pollution, to immediately notify other States that they deemed likely to be affected by such damage, as well as the competent international organizations. States in the area affected, in accordance with their capabilities, and the competent international organizations must cooperate, to the extent possible, in eliminating the effects of pollution and preventing or minimizing the damage. To that end, States must jointly develop and promote contingency plans for responding to pollution incidents in the marine environment.

38. The Joint Environment Unit of UNEP and the Office for the Coordination of Humanitarian Affairs emphasized its ability to facilitate the provision of technical support in the form of rapid environmental assessments and/or on-site sampling and analysis and/or technical expert deployments to Member States affected by an emergency caused by waste originating from chemical munitions dumped at sea. In the event that such waste would cause an emergency and corresponding humanitarian needs overwhelm the response capacity of a concerned State, the Office for the Coordination of Humanitarian Affairs could be called upon to mobilize and coordinate international emergency assistance with the services of a United Nations Disaster Assessment and Coordination Team.

39. The United Nations Disaster Assessment and Coordination Team is a team of volunteer emergency response specialists with varied skills from approximately 80 participating countries and some 20 United Nations agencies, international and regional organizations and non-governmental organizations. The Team had proven effective in facilitating the coordination of incoming international humanitarian assistance through the set-up of an On-Site Operations Coordination Centre.

40. It was also mentioned that the role of the Office for the Coordination of Humanitarian Affairs included the promotion of humanitarian civil-military coordination. The Guidelines on the Use of Foreign Military and Civil Defence Assets in Disaster Relief (Oslo Guidelines) provided advice on how to ensure that foreign military and defence assets supported and complemented the relief operation without compromising principled humanitarian action.

41. The internationally agreed Guidelines on the Use of Military and Civil Defence Assets to Support United Nations Humanitarian Activities in Complex Emergencies (MCDA Guidelines) spelled out principles and concepts for coordination with the military in that context. The Guidelines should also be referred to when considering the use of foreign military assets in response to incidents involving waste originating from chemical munitions dumped at sea.

42. The UNEP Regional Seas Programme shared that different Regional Seas Conventions and Action Plans had started developing cooperation with the regional fishery bodies and that the issue could be brought to the attention of relevant stakeholders together with the regional fishery bodies, as waste originating from chemical munitions dumped at sea had negative impacts on fishermen as well as on the marine environment.

43. IMO highlighted that contacts had been established between its secretariat and OPCW, the OSPAR Commission and HELCOM SUBMERGED, which was dealing with munitions in the Baltic Sea that had been dumped there before its establishment.

44. The secretariat of the Convention on the Protection of the Underwater Cultural Heritage of 2001, adopted at the thirty-first session of the General Conference of UNESCO, pointed out that it provided expert assistance as well as capacity-building and facilitated cooperation in the domain of underwater cultural heritage protection. In certain, though rare, cases, the secretariat was also concerned with sites that contained waste originating from chemical munitions dumped at sea, and synergies might arise. UNESCO also mentioned that it had established a wide network in the domain of underwater archaeology, joining together 15 accredited non-governmental organizations, more than 20 universities, a scientific and technical advisory body and more than 50 competent authorities. As it was often underwater archaeologists who comprehensively inventoried wrecks and material-deposit sites, they were generally in the best position to contribute evaluations of their risk and significance. Risk management measures in the protection and management regimes of the sites, and the education of local people and visiting recreational divers about non-intrusive safe access to the sites, was part of their work. They also closely monitored, in cooperation with conservators, the decay of metal parts of wrecks and rusticle formation. They could therefore give comprehensive advice on the issue.

45. HELCOM shared that both HELCOM RESPONSE and HELCOM SUBMERGED were involving not only national governments but also industry and civil society members in their work. The HELCOM groups HELCOM CHEMU, HELCOM MUNI and HELCOM SUBMERGED had contributed the most concrete activities, involving regional meetings of experts to share knowledge and create a regional synthesis on the issues.

III. Way forward

A. Views on the possibility of establishing a database and its institutional framework

46. General Assembly resolution 68/208 invited the Secretary-General to seek the views of Member States and relevant regional and international organizations with a view to exploring the possibility of establishing a database and options for the most appropriate institutional framework for such a database. The resolution indicated that such a database could contain relevant and voluntarily shared information on, inter alia, the location of dumping sites, the type, quantity and, to the extent possible, the current condition of chemical munitions, the recorded environmental impact, best practices on risk prevention and response to incidents or accidental

encounters and destruction or impact-reduction technologies, including by means of data collection and management.

47. Some responses to the questionnaire expressed support on establishing such a database and willingness to contribute to its best possible outcome.

48. Lithuania pointed out that a database for waste originating from chemical munitions dumped at sea on the basis of the CHEMSEA project had already been created and that at present the database was being upgraded. Croatia called for the Regional Seas Conventions and Action Plans and their databases to be taken into consideration when developing such a database at the global level.

49. IMO mentioned that the governing bodies of the London Convention and London Protocol had instructed its Scientific Groups to undertake the necessary preparatory work to identify the various sources of data that could feed into a future database on chemical munitions dumped at sea. More specifically, IMO pointed out that there already were regional databases that could be built on or used as examples, for example the OSPAR database, and there also were global databases to which governments could submit information in relation to global treaties on other and related issues.

50. IMO pointed out that its Global Integrated Shipping Information System, for example, was an established online system for the reporting of issues related to shipping, as well as a module on the reporting of dumping of waste at sea that allowed for geographical entries and maps or links to reports, which was accessible to IMO member States and, to a limited extent, the public. With the development of a new interface to allow public extraction of relevant chemical munitions dumping sites, it could be explored as an option for the proposed database, although at present IMO did not have sufficient resources for such development.

51. The Joint Environment Unit of UNEP and the Office for the Coordination of Humanitarian Affairs pointed out that such a database could also support risk reduction measures, as well as preparedness for response, by serving as a repository for information on best practices on risk prevention and response to incidents and linking to existing emergency and humanitarian response procedures and guidelines.

52. In terms of the most appropriate institutional framework for such a database, Myanmar suggested OPCW. Lithuania also had a similar suggestion, stating that OPCW and its technical secretariat should be the most appropriate framework for such a database. Madagascar suggested that establishing such a database should be country-driven, and at the national level government ministries in charge of environment should act as a neutral medium.

53. Germany, however, expressed an objection to the idea of establishing such a database, based on an overall disagreement with any proposal that focused only on the environmental effects of waste originating from chemical munitions dumped at sea. Recognizing the complex nature of that waste, Germany stated that it supported a more systematic approach and did not see dumped chemical weapons as an environmental problem as such. Although the Government of Germany did participate in various international activities on munitions in marine waters, the Government regarded ideas for an international munitions database or any international comprehensive and systematic data collection of munitions and warfare as a non-option.

54. The UNEP Regional Seas Programme highlighted that data were not available in most of the regions and the development of a database in terms of location and distribution of waste originating from chemical munitions dumped at sea would be difficult, and that the environmental effects of such waste were not well understood. The data were often held by ministries of defence or the military, and literature and previous reports would serve as the basis of the data. The UNEP Regional Seas Programme stressed that, therefore, the ability to allow information-sharing between different sectoral organizations, including defence, transportation and environment, was a key factor to consider when choosing an appropriate institutional framework for the database.

55. HELCOM indicated that it did not have a coordinated view on the matter. HELCOM stated that it had several regional databases and, if its contracting parties so decided, those regional databases could be organized for chemical munitions. Regional datasets on hazardous underwater objects (munitions, wrecks and other dumped objects) were being created and had been mentioned within HELCOM SUBMERGED as possible new developments. Even if data could be administered and collected within regions or locally, a global common structure and nomenclature could be a good way to share the information between regions and for global purposes.

B. Views on the appropriate intergovernmental bodies for further consideration and implementation of waste originating from chemical munitions dumped at sea

56. In its resolution 68/208, the General Assembly invited the Secretary-General to seek the views of Member States and relevant regional and international organizations on the appropriate intergovernmental bodies for further consideration and implementation, as appropriate, of the cooperative measures to assess and increase awareness of environmental effects related to waste originating from chemical munitions dumped at sea envisaged in the resolution.

57. Lithuania suggested that either the General Assembly or OPCW, as the only specialized body that dealt with chemical weapons, could effectively respond to the threats of chemical weapons dumped at sea.

58. Similarly, Myanmar supported OPCW as the most appropriate intergovernmental body for further consideration and implementation of relevant issues.

59. Madagascar was of the view that the Division for Ocean Affairs and the Law of the Sea, in conjunction with the Chemicals and Waste Branch of UNEP, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the Stockholm Convention on Persistent Organic Pollutants, should take the lead.

60. Guatemala was of the view that IMO should be the intergovernmental body for further consideration and implementation of issues related to the cooperative measures envisioned in General Assembly resolution 68/208.

61. Germany was of the view that existing regional and other instruments were efficient and sufficient, and therefore did not support the idea that any new or other United Nations bodies should take over responsibility for such activities. Germany also stated that, in the follow-up to General Assembly resolution 65/149, in March 2015 the OPCW secretariat had proposed in a vision paper, entitled "The OPCW in 2025: ensuring a world free of chemical weapons", to act as a platform for neutral discussion.

62. IMO emphasized that anybody tasked with the issue should have a global mandate in relation to the issue. Given the role of the London Convention and London Protocol as the main global regulatory mechanism for the dumping of wastes and other matters at sea, it would seem appropriate that such a cooperative measure should fall under the remit of that Convention and Protocol. It was mentioned that a joint initiative or cooperation with OPCW could be explored as an option.

63. HELCOM did not have a coordinated view on the matter. HELCOM and the UNEP Regional Seas Programme both highlighted their experience and the potential inputs they could provide to any global organizational set-up.

64. Other Member States and relevant regional and international organizations did not express any specific views on the matter.